

and said plurality encoding all of the polypeptide components of the polypeptide components of the multimeric protein; and

(b) culturing the plant cell under conditions suitable for protein expression, thereby producing the multimeric protein.

55. (New) The method of claim 54, further comprising the step of isolating the produced multimeric protein from the cell.

56. (New) The method of claim 54, wherein the plant cell is intact

57. (New) The method of claim 54, wherein the multimeric protein is biologically active.

58. (New) The method of claim 54, wherein each plasmid encodes a single polypeptide component of the multimeric protein.

59. (New) The method of claim 54, wherein at least one plasmid encodes multiple polypeptide components of the multimeric protein.

60. (New) The method of claim 54, wherein at least one plasmid comprises a sequence encoding a single peptide.

61. (New) The method of claim 54, wherein at least one plasmid comprises a sequence encoding the amino acid sequence KDEL.

62. (New) The method of claim 54, wherein at least one plasmid comprises a sequence encoding a selectable marker.

63. (New) The method of claim 54, wherein the plant cell is from a dicotyledonous plant.

64. (New) The method of claim 54, wherein the plant cell is from a monocotylendous plant.

65. (New) The method of claim 63, wherein said dicotyledonous plant is tobacco.

66. (New) The method of claim 64, wherein said monotylenous plant is *Lenna gibba* (L.)

67. (New) The method of claim 54, wherein the multimeric protein is selected from the group consisting of an immunoglobulin molecule, a receptor-ligand complex, a receptor homodimer, a receptor herterodimer, and a trimeric G-protein.

68. (New) The method of claim 66, wherein the immunoglobulin molecule is selected from the group consisting of IgA, IgM, IgG, IgD, and IgE.

69. (New) The method of claim 66, wherein the immunoglobulin molecule is IgA.

70. (New) Microparticles coated with a plurality of plasmids, each plasmid encoding less than all of the polypeptide components of a multimeric protein, and said plurality encoding all of the polypeptide components of the multimeric protein.

71. (New) The microparticles of claim 70, wherein the microparticles are tungsten or gold.

72. (New) A transgenic plant or plant cell expressing a multimeric protein that is heterologous to the plant cell, wherein said plants or plant cells are characterized by adjacent integration of multiple expression cassettes, each expression cassette encoding less than all of the polypeptide components of the multimeric protein, and said multiple expression cassettes encoding all of the polypeptide components of the multimeric protein.

73. (New) The method of claim 69, wherein the IgA molecule is secretory.

REMARKS

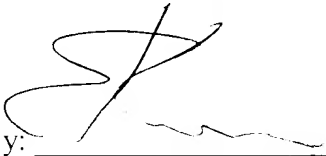
Applicant recently received a notice of allowance for all of the claims of parent case, Serial No. 09/312,157. This new application adds twenty claims, none of which add new matter and all of which find support throughout the specification as originally filed, i.e., e.g., page 13 line 12 to page 14 line 11; page 62 line 24 to page 64 line 12; page 47,

lines 24-27; page 53 lines 3-17; page 57 line 28 to page 60 line 37; page 12 line 24 to page 13 line 11; pages 61-62; page 64 lines 14-17; and page 106 line 45.

Applicant believes that no fees are due in connection with this amendment. If any fees are required please debit our **Deposit Account No. 50-1273**, referencing our Docket No. 030905.0002.CON1.

Respectfully submitted,

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